Jürgen O Schumacher

List of Publications by Year
in descending order

14 papers	521 citations	933447 10 h-index	1058476 14 g-index
14 all docs	14 docs citations	14 times ranked	584 citing authors

#	Article	IF	Citations
1	Numerical modeling of highly doped Si:P emitters based on Fermi–Dirac statistics and self-consistent material parameters. Journal of Applied Physics, 2002, 92, 3187-3197.	2.5	154
2	Free open reference implementation of a two-phase PEM fuel cell model. Computer Physics Communications, 2019, 234, 223-234.	7.5	85
3	Coupled Optical and Electronic Modeling of Dye-Sensitized Solar Cells for Steady-State Parameter Extraction. Journal of Physical Chemistry C, 2011, 115, 10218-10229.	3.1	58
4	Calculation of the Energy Band Diagram of a Photoelectrochemical Water Splitting Cell. Journal of Physical Chemistry C, 2014, 118, 29599-29607.	3.1	56
5	AC impedance modelling study on porous electrodes of proton exchange membrane fuel cells using an agglomerate model. Journal of Power Sources, 2007, 173, 346-356.	7.8	51
6	Experimental parameter uncertainty in proton exchange membrane fuel cell modeling. Part I: Scatter in material parameterization. Journal of Power Sources, 2019, 438, 227018.	7.8	32
7	Experimental parameter uncertainty in proton exchange membrane fuel cell modeling. Part II: Sensitivity analysis and importance ranking. Journal of Power Sources, 2019, 439, 126529.	7.8	19
8	Analysis of Optical Losses in a Photoelectrochemical Cell: A Tool for Precise Absorptance Estimation. Advanced Functional Materials, 2018, 28, 1702768.	14.9	18
9	Modeling the Effects of Using Gas Diffusion Layers With Patterned Wettability for Advanced Water Management in Proton Exchange Membrane Fuel Cells. Journal of Electrochemical Energy Conversion and Storage, 2018, 15, .	2.1	17
10	Application of an improved band-gap narrowing model to the numerical simulation of recombination properties of phosphorus-doped silicon emitters. Solar Energy Materials and Solar Cells, 2001, 65, 95-103.	6.2	11
11	2+1D modelling of a polymer electrolyte fuel cell with glassy-carbon microstructures. Mathematical and Computer Modelling of Dynamical Systems, 2012, 18, 355-377.	2.2	8
12	Exploring the thermodynamics of the bromine electrode in concentrated solutions for improved parametrisation of hydrogen–bromine flow battery models. Journal of Power Sources, 2021, 508, 230202.	7.8	6
13	An Ensemble Monte Carlo Simulation Study of Water Distribution in Porous Gas Diffusion Layers for Proton Exchange Membrane Fuel Cells. Journal of Electrochemical Energy Conversion and Storage, 2018, 15, .	2.1	3
14	Simulation of Mass and Heat Transfer in an Evaporatively Cooled PEM Fuel Cell. Energies, 2022, 15, 2734.	3.1	3